

II. *Observations made at Southwick, in the County of Northampton, Long. West from London, 00 deg. 30 min. Lat. 51 deg. 58 min. nearly, with a thirteen foot Telescope, whose Aperture was 2.4 Inches, and Charge 2.5 Inches, all by apparent Time. By the ingenious George Lynn, Esq;*

1724. **N** *Ovemb. 8th, 7^h 37' 7"* the first Satellite of *Jupiter* began to emerge: The same Day at 6^h 24' 20". The third Satellite began to immerge,

1725. *July 31st, 10^h 43' 20"*. The third Satellite immersed, that is I quite lost Sight of it, (at a little above a Semidiameter from *Jupiter*) but it began sensibly to abate of its Light above three Minutes before.

August 9th, 11^h 51' 20" I lost Sight of the second Satellite; but it began sensibly to abate of its Light, about two Minutes before.

August 18th, 9^h 25' 50". The first Satellite immersed very near *Jupiter's* body.

The same Night, both my self and Son plainly saw the Shadow of the third Satellite pass over *Jupiter's* body, like a small black Patch, tracing along the Middle of his bright Belt, above the most Southern Black one, and was in his Axis, as near as I could guess by the Eye, at 10^h 25, or 30'.

N. B. We could see it for about the middle Half of its Track, but not near *Jupiter's* Edges.

Octob. 11th, 6^h 31' 45". The third Satellite began to emerge, and was full three Minutes and a half, before it was at its greatest Lustre, which I could then

then well judge of, by comparing it with the first Satellite, which was just a little above it, but nearer *Jupiter*. It came out of the Shadow, about half a Diameter from *Jupiter's* Edge.

Decemb. 26th, $5^h 51' 12''$ the second Satellite began to emerge.

1725-6, Jan. 5th, $6^h 28' 30''$. The third Satellite began to emerge.

1724 June 23d, $10^h 15'$ *Saturn* followed a Star (in *Senex's* *Zodiack* but without any distinguishing Mark) $51''$ and an half of Right Ascension in Time, and declin'd from it South $40''$.

June 25th, $10^h 0'$ *Saturn* followed the same Star, $13''$ of Right Ascension in Time, and declined from it South, $3''$ or $4''$ only,

1725. Decemb. 17th, $8^h 0'$ *Jupiter* preceded ϕ *Aquarii* $4''$ and an half of Right Ascension in Time, and declin'd from it South $11' 45''$.

N. B. When two of *Jupiter's* Satellites are passing by one another, the one approaching, the other receding from him (if not too far distant from his Body) the Time, when they become equally distant from his Limb, may, by the Eye, be very nearly determined, especially when the first and second so pass, as by Experience I have found by the above mention'd Glafs, within less than half a Minute in Time, by the Agreement of two good Observers.

Therefore the taking the Time of those Passages, I mean of the first and second Satellites, would be of more use in settling the Longitude of Places, than the Eclipses of any of the Satellites, except the first, by Reason of the Length of Time they take in emerging, or immerging, according to these Observations.